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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/384,315	08/27/99	BOUILLLOUX	A ATOCM-154

023599 IM52/0720  
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EXAMINER

SELLERS, R

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 07/20/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

**Office Action Summary**

Application No.

09/384,315

Applicant(s)

BOUILLLOUX ET AL.

Examiner

Robert Sellers

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 July 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20-40 is/are pending in the application.
- 4a) Of the above claim(s) 21, 22, 24-29, 31, 33-37, 39 and 40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20, 23, 30, 32 and 38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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Claims 21, 22, 24-29, 31, 33-37, 39 and 40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to non-elected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.

The 35 U.S.C. 112, second paragraph, rejection is rescinded since the scope of the claimed components is clearly defined, although not enabled with respect to components (A) and (C) for the reasons espoused hereinbelow. The 35 U.S.C. 102(b) rejection over Japanese Patent No. 6-299052 is withdrawn due to the claims limited to an ethylene/unsaturated carboxylic acid anhydride copolymer as (B) which is not recited by the anhydride-grafted ethylene-(meth)acrylate copolymer of the reference.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 20, 23, 30, 32 and 38 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The deletion of the term "product" from the appropriate sections of the specification and abstract resolves this issue. However, the lack of enablement for the unsaturated epoxide as a species of (A) and an unsaturated carboxylic acid as a species of (C) is maintained for the reasons of record set forth in the previous Office action.

The arguments filed July 13, 2001 have been considered but are unpersuasive.

Page 3, lines 16-18 describes (A) in a first form as "either a copolymer of ethylene and of an unsaturated epoxide or a polyolefin grafted with an unsaturated epoxide." Page 5, lines 11-15 discloses (C) as, for example, a partially or completely hydrolyzed copolymer of ethylene and an unsaturated carboxylic acid anhydride or a copolymer of ethylene and an unsaturated carboxylic acid such as (meth)acrylic acid. There are no other forms of (A) and examples of (B) revealed anywhere else in the specification. The examples employ only species of (A) and (C) within the described copolymer limits (page 7, lines 31-33, Lotader 2 and page 8, lines 3-4, Lucalene 3110).

There is not even any generic terminology which would enable one skilled in the art to prepare (A) and (C) other than the specifically named copolymers. It is questionable whether a composition comprising non-polymerized glycidyl (meth)acrylate as (A), ethylene-maleic anhydride copolymer as (B) and non-polymerized (meth)acrylic or maleic acid as (C) would provide an operable crosslinked phase within the confines of the disclosed and claimed subject matter.

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Furthermore, the copolymers deemed to be within the generic categories of unsaturated epoxide (A) and unsaturated carboxylic acid (C) do not conform to the definition of those terms since an unsaturated epoxide and unsaturated carboxylic acid must possess an non-polymerized unsaturated moiety. The copolymers contain polymerized epoxide and carboxylic acid substituents wherein the unsaturation has been consumed via the addition polymerization with ethylene.

Claims 20, 25-29, 35, 37, 39 and 40 would be subjected to a rejection **if not withdrawn** under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention [bold lettering added].

Claim 35 requires an unsaturated epoxide as (A). Claim 37 depends on claim 35 and denotes an ethylene/glycidyl methacrylate copolymer as a species of unsaturated epoxide. A copolymerization product involving glycidyl methacrylate cannot be accurately identified as an unsaturated epoxide since the methacrylate portion of the monomer has been addition polymerized and has no unsaturation.

Claims 25-29 and 40 set forth an ethylene/alkyl (meth)acrylate/(meth)acrylic acid copolymer as a species of unsaturated carboxylic acid (C). A copolymerization product with (meth)acrylic acid cannot be correctly designated as an unsaturated carboxylic acid because the methacryl part of the monomer has been addition polymerized to consume the unsaturation.

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Claims 20, 23, 32 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spelthann.

Spelthann is directed to a blend of a thermoplastic polyolefin (col. 1, lines 29-30, component (1)(a)), an ethylene/n-butyl acrylate/glycidyl methacrylate or ethylene/glycidyl methacrylate copolymer (col. 1, lines 45-52, component (2)(b) and col. 5, lines 5-8), a copolymer of ethylene and an unsaturated carboxylic acid (col. 1, lines 31-35, component (1)(b) and col. 3, lines 36-40) and an ethylene/unsaturated carboxylic acid/carbon monoxide terpolymer (col. 1, lines 38-44, component (2)(a) and col. 4, lines 27-29).

Although the prior art terpolymer containing an unsaturated carboxylic acid is not exemplified, it would have been obvious to incorporate a carboxylic acid monomer in order to facilitate the curability.

Claim 30 necessitates the thermoplastic polymer to be a polyamide or saturated polyester which is not recited by the thermoplastic polyolefin of Spelthann.

Any inquiry concerning this communication should be directed to Robert Sellers at telephone number (703) 308-2399 (Fax no. (703) 872-9310).



Robert Sellers  
Primary Examiner  
Art Unit 1712

RS

7/19/01